

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: J. AC. XU Examiner #: 71429 Date: 6/6/01
 Art Unit: 1774 Phone Number 30 _____ Serial Number: 09/010311
 Mail Box and Bldg/Room Location: 110 SE Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: _____

Inventors (please provide full names): _____

Earliest Priority Filing Date: _____

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

STAFF USE ONLY

	Type of Search	Vendors and cost where applicable
Searcher: <u>84</u>	NA Sequence (#) _____	STN <u>\$139.14</u>
Searcher Phone #: _____	AA Sequence (#) _____	Dialog _____
Searcher Location: _____	Structure (#) <u>(1)</u>	Questel/Orbit _____
Date Searcher Picked Up: _____	Bibliographic _____	Dr.Link _____
Date Completed: <u>6-12-01</u>	Litigation _____	Lexis/Nexis _____
Searcher Prep & Review Time: <u>15</u>	Fulltext _____	Sequence Systems _____
Clerical-Prep-Time: _____	Patent Family _____	WWW/Internet _____
Online Time: <u>30</u>	Other _____	Other (specify) _____



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Scientific and Technical Information Center

Search Results Feedback Form

The search results generated for your recent request are attached. If you have any questions or comments (compliments or complaints) about the scope or the results of the search, please contact the searcher whose name is circled below.

Kathleen Fuller

Eric Linnell ✓

Tim Saunders

All the searchers are located in the library in CP3/4 3D62

SSEARCH REQUEST FORM
Scientific and Technical Information Center

Examiner# : 77429 Ling Xu
Art Unit : 1774
Phone Number: 305-0395
Date: 6/6/2001
Serial Number: 09/614,511
MailBox & Bldg/Room Location: 11D28
Results Format Preferred (circle): Paper Disk E-mail

If more than one search is submitted, please prioritize searches in order of need.

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc., if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention:

Material for use in a light-emitting device and highly efficient electroluminescent device

Inventors (please provide full names):

Wanda Andreoni; Alessandro Curioni

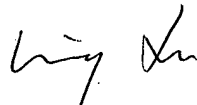
Earliest Priority Filing Date: 7/12/1999

For Sequence Searches Only Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.

Please search the compound described in claims 1-3. Also search the compound with EL device, see claim 15.

Call me at 305-0395 if you have any questions.

Thanks



=> file reg

FILE 'REGISTRY' ENTERED AT 15:13:59 ON 12 JUN 2001
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STRUCTURE FILE UPDATES: 10 JUN 2001 HIGHEST RN 340232-86-2
DICTIONARY FILE UPDATES: 10 JUN 2001 HIGHEST RN 340232-86-2

TSCA INFORMATION NOW CURRENT THROUGH January 11, 2001

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conducting SmartSELECT searches.

Structure search limits have been increased. See HELP SLIMIT
for details.

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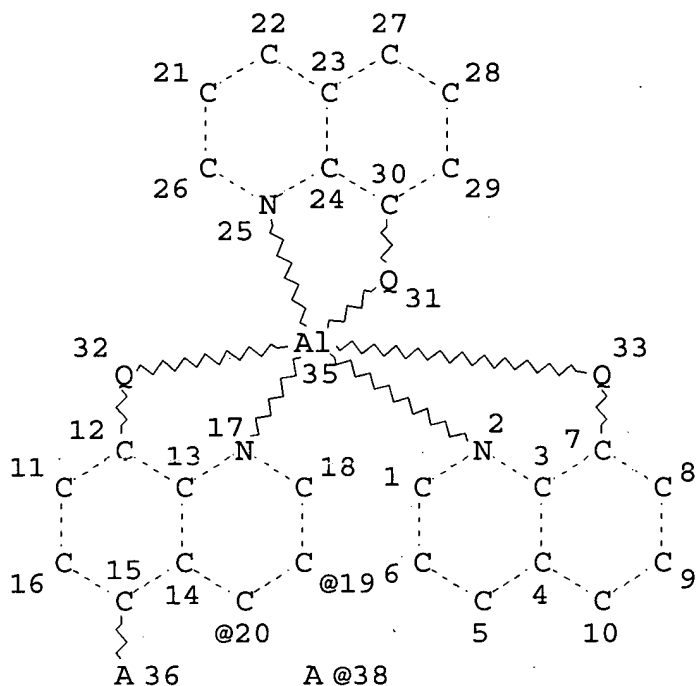
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0 S L3

L5 FILE 'ZCAPLUS' ENTERED AT 15:02:36 ON 12 JUN 2001
4 S L3

FILE 'REGISTRY' ENTERED AT 15:13:59 ON 12 JUN 2001

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L1 STR



VPA 38-19/20 U

NODE ATTRIBUTES:

NSPEC IS RC AT 36

NSPEC IS RC AT 38

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 36

STEREO ATTRIBUTES: NONE

L3 29 SEA FILE=REGISTRY SSS FUL L1

100.0% PROCESSED 259 ITERATIONS

SEARCH TIME: 00.00.01

29 ANSWERS

=> file zcaplus

FILE 'ZCAPLUS' ENTERED AT 15:15:43 ON 12 JUN 2001

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FILE COVERS 1947 - 12 Jun 2001 VOL 134 ISS 25
FILE LAST UPDATED: 11 Jun 2001 (20010611/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

This file supports REGISTRY for direct browsing and searching of all substance data from the REGISTRY file. Enter HELP FIRST for more information.

ZCAplus now provides online access to patents and literature covered in CA from 1947 to the present. On April 22, 2001, bibliographic information and abstracts were added for over 2.2 million references published in CA from 1947 to 1966.

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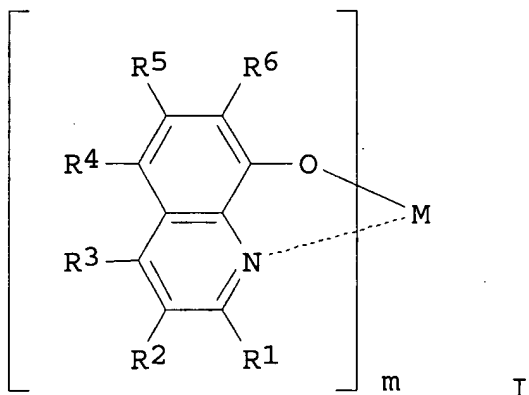
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=> d 15 1-4 ibib abs hitstr hitind

L5 ANSWER 1 OF 4 ZCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 2001:356701 ZCAPLUS
DOCUMENT NUMBER: 134:359320
TITLE: Organic electroluminescent device
INVENTOR(S): Sakaue, Megumi; Sakaki, Shigeyoshi; Sugimoto, Manabu
PATENT ASSIGNEE(S): Matsushita Electric Industrial Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001135481	A2	20010518	JP 1999-319191	19991110

GI

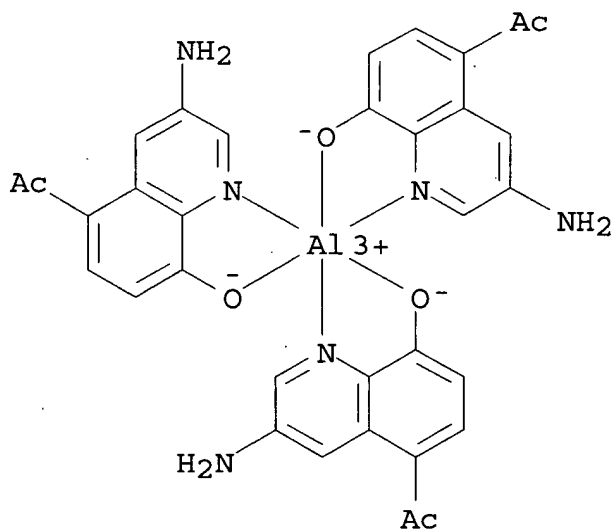


AB The invention relates to an org. electroluminescent device that provides stable and high luminance red and blue-emitting devices, comprising a substance represented by I [at least one of R1-R3 is electron donating group; at least one of R4-R6 is electron attracting group; M = metal atom ; and m = 1-3 integer] in light-emitting and/or electron transporting layers.

IT 339074-76-9 339074-77-0 339074-79-2
(light-emitting layer of org. electroluminescent device)

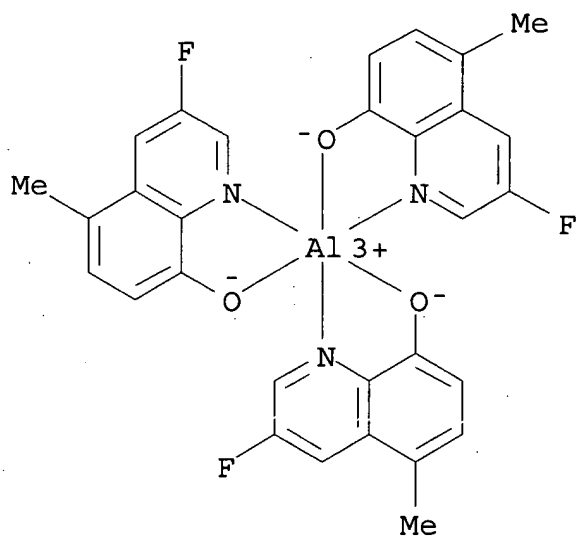
RN 339074-76-9 ZCAPLUS

CN Aluminum, tris[1-[3-amino-8-(hydroxy-.kappa.O)-5-quinolinyl-.kappa.N]ethanonato]- (9CI) (CA INDEX NAME)



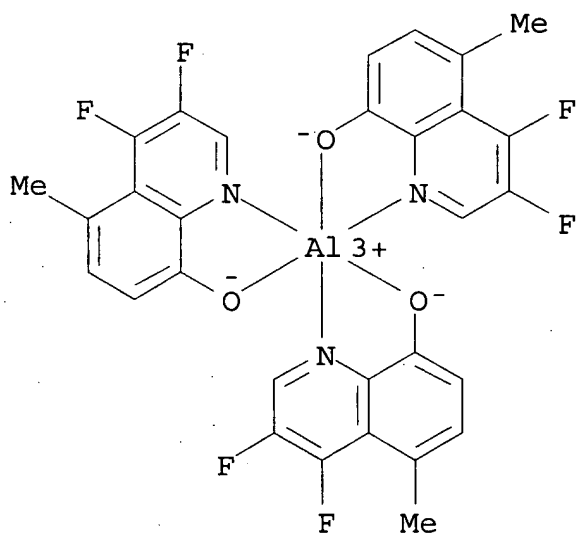
RN 339074-77-0 ZCAPLUS

CN Aluminum, tris(3-fluoro-5-methyl-8-quinolinolato-.kappa.N1,.kappa.O8)- (9CI) (CA INDEX NAME)



RN 339074-79-2 ZCAPLUS

CN Aluminum, tris(3,4-difluoro-5-methyl-8-quinolinolato-
.kappa.N1,.kappa.O8)- (9CI) (CA INDEX NAME)



IC ICM H05B033-14

ICS C09K011-06; H05B033-22

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

Section cross-reference(s): 74

IT 339074-74-7 339074-75-8 339074-76-9 339074-77-0
339074-78-1 339074-79-2

(light-emitting layer of org. electroluminescent device)

L5 ANSWER 2 OF 4 ZCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:638398 ZCAPLUS

DOCUMENT NUMBER: 133:244884

TITLE: Organic electroluminescent component

INVENTOR(S): Tsuge, Hodaka; Ishii, Satoshi; Shimada, Yoichi

PATENT ASSIGNEE(S): Honda Motor Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

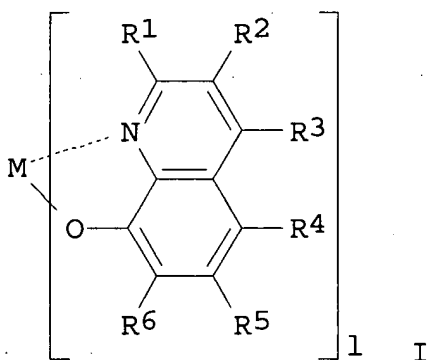
LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000252072	A2	20000914	JP 1999-55905	19990303

OTHER SOURCE(S): MARPAT 133:244884
GI



AB The invention refers to an org. electroluminescent component comprising I [R1-6 = H, hydrocarbon or oxy group, where at least one is not H; M = metal; l = valence of M] in the luminescent layer.

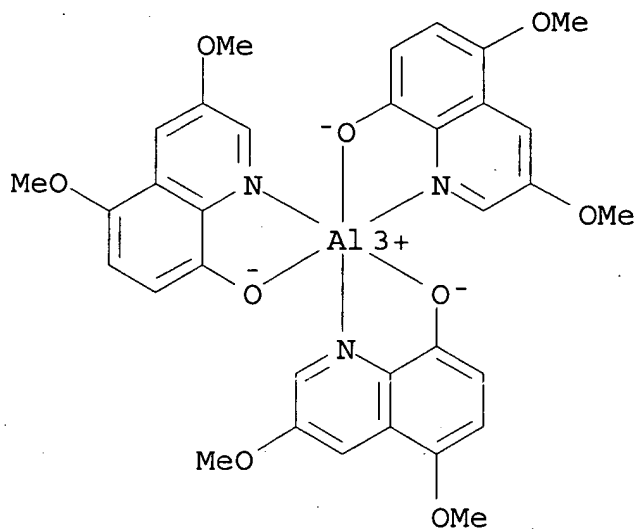
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 292631-74-4 292631-77-7 292631-78-8
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 292631-85-7 292631-87-9 292631-88-0
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 292631-93-7 292631-94-8 292631-95-9

(org. electroluminescent component)

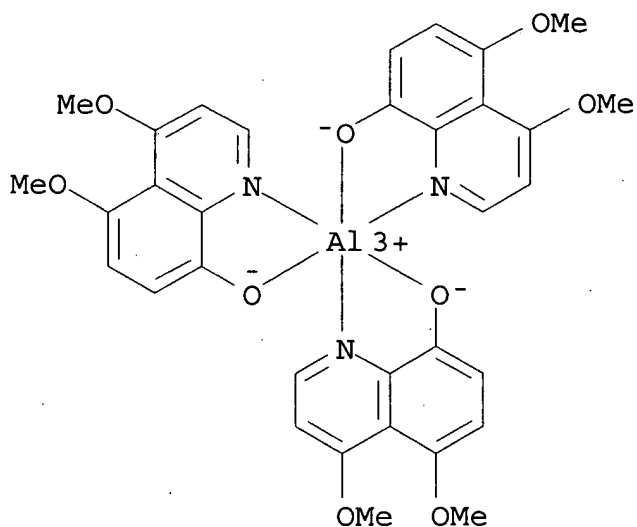
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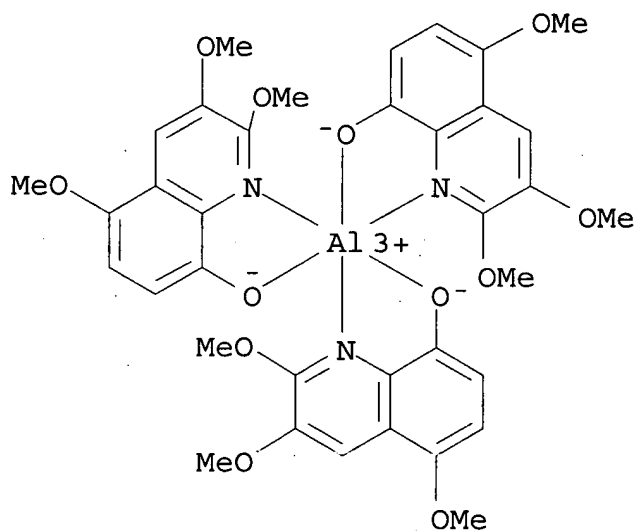


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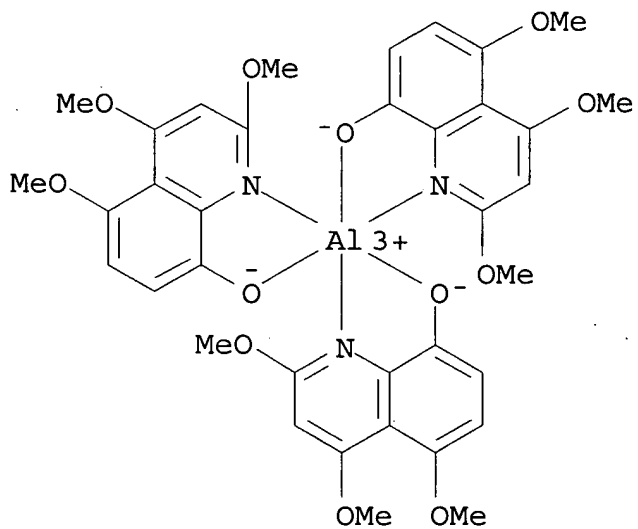
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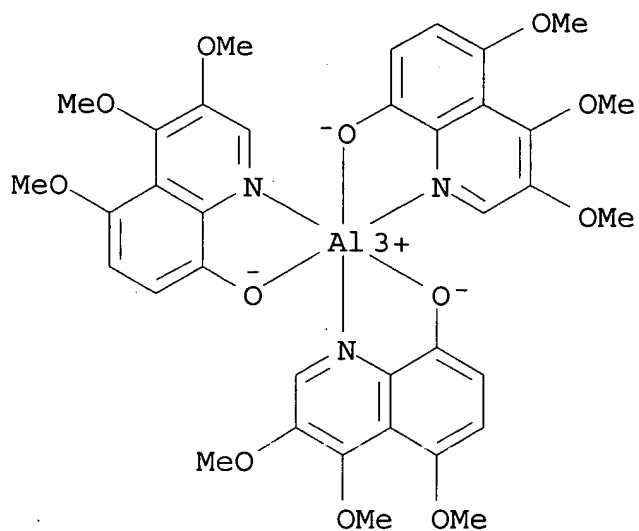
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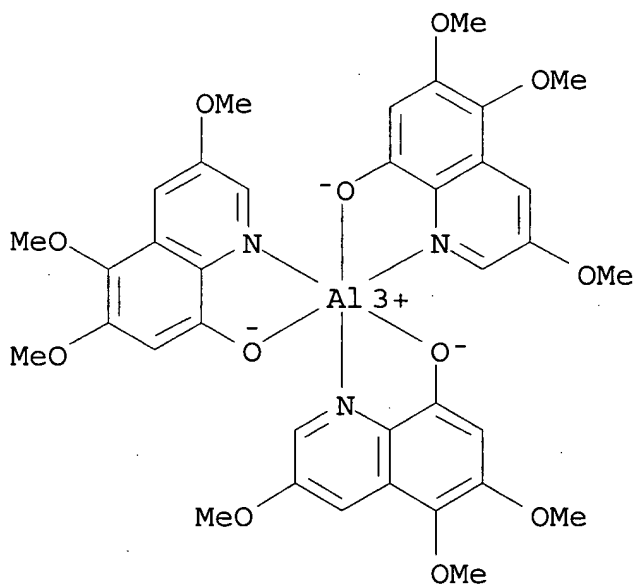


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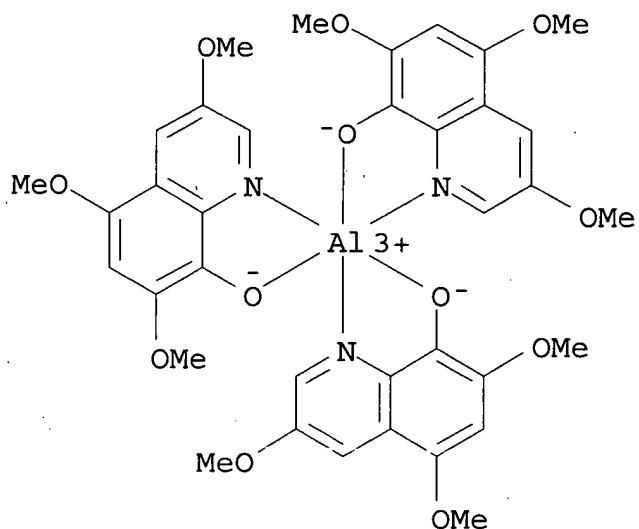
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(9CI) (CA INDEX NAME)



RN 292631-67-5 ZCAPLUS
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 (9CI) (CA INDEX NAME)

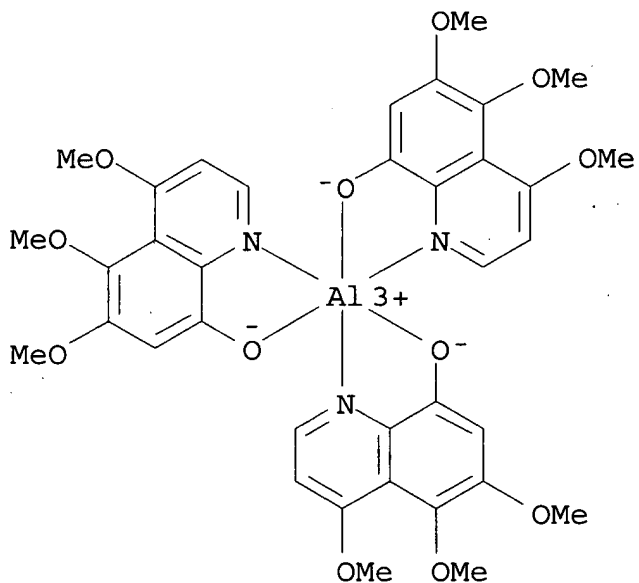


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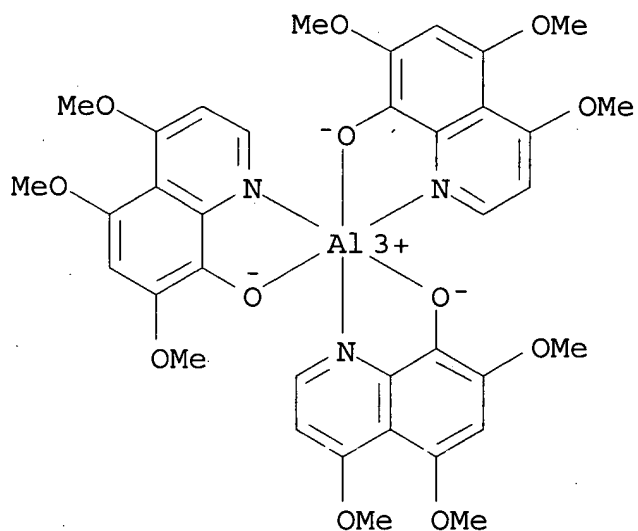
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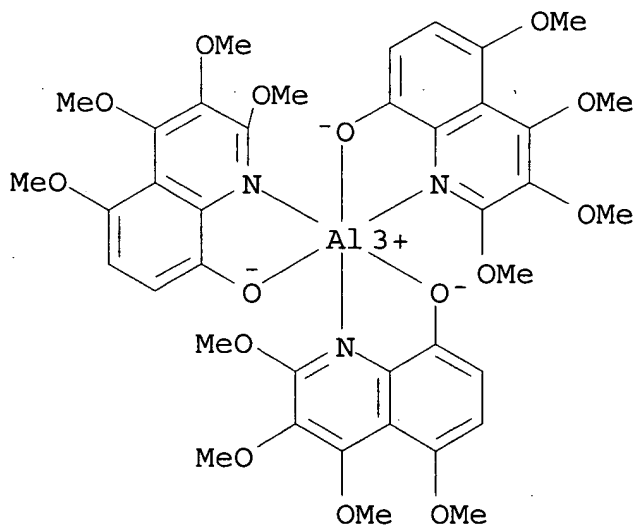


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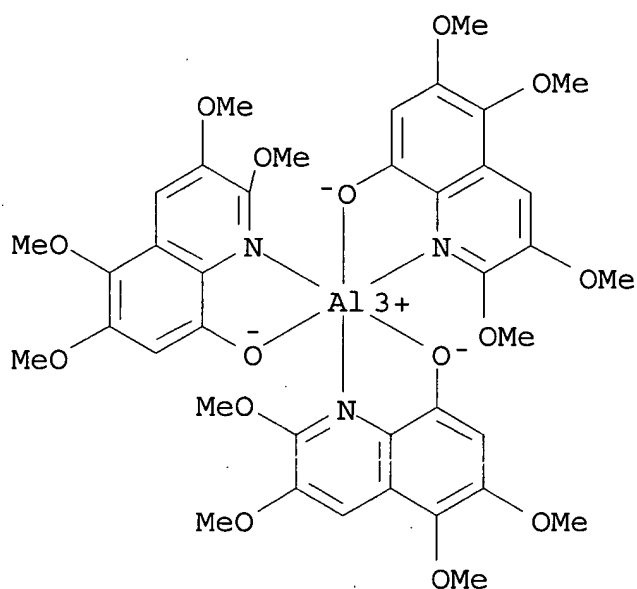
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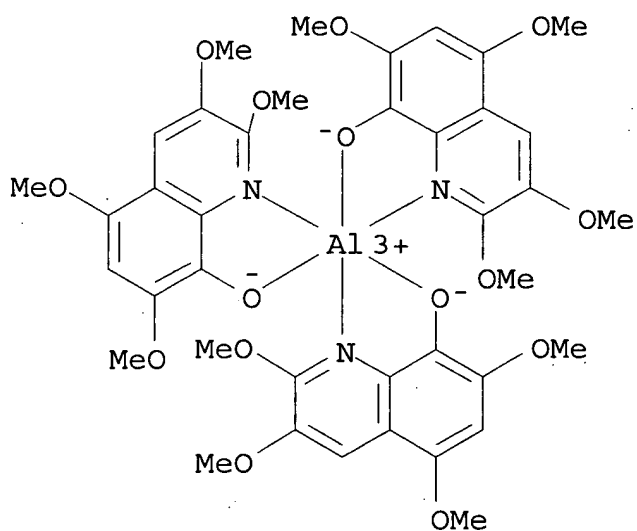
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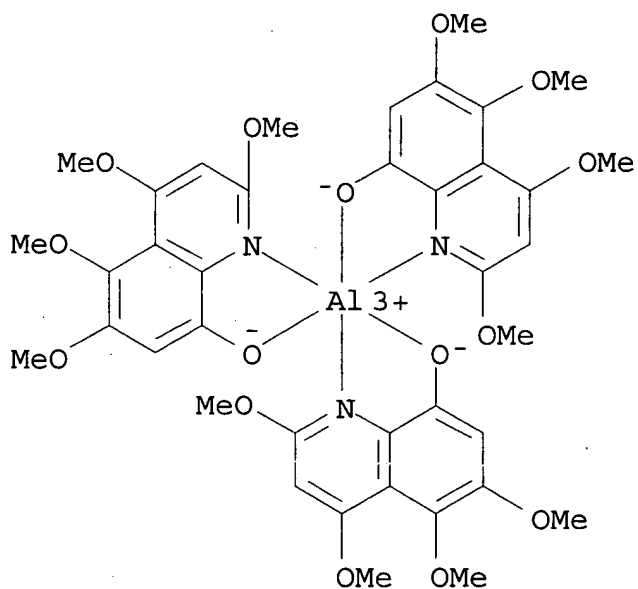
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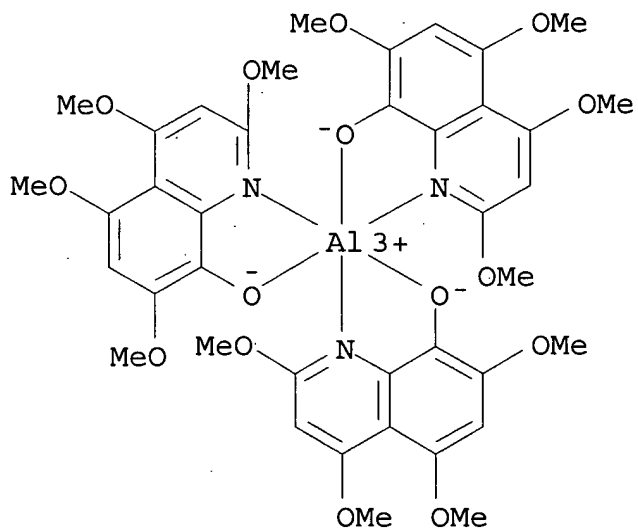
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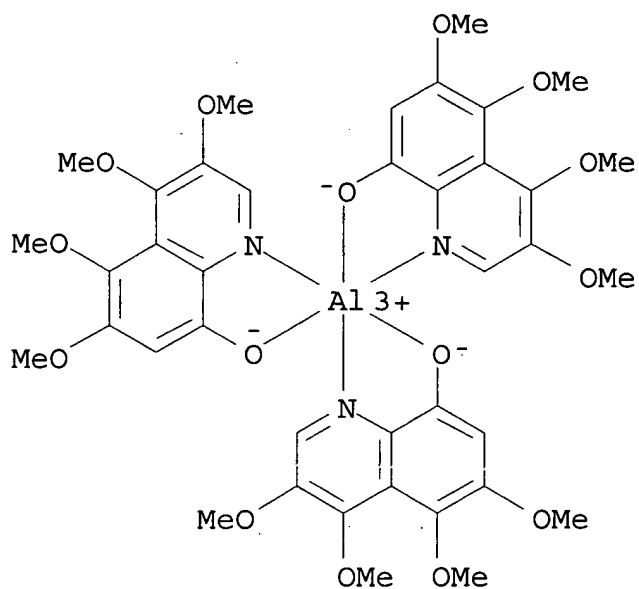
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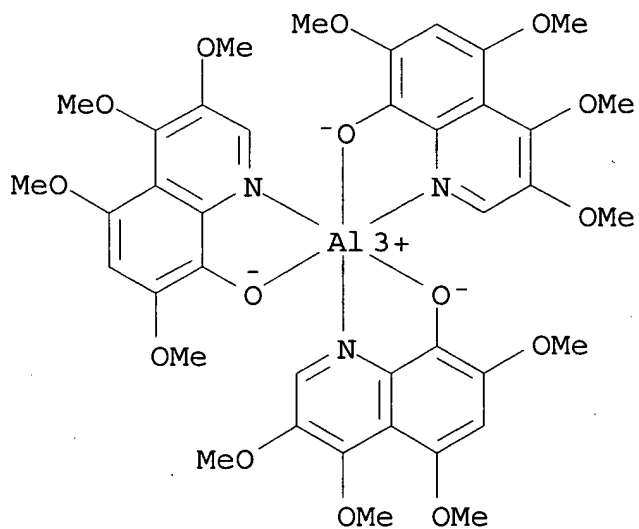
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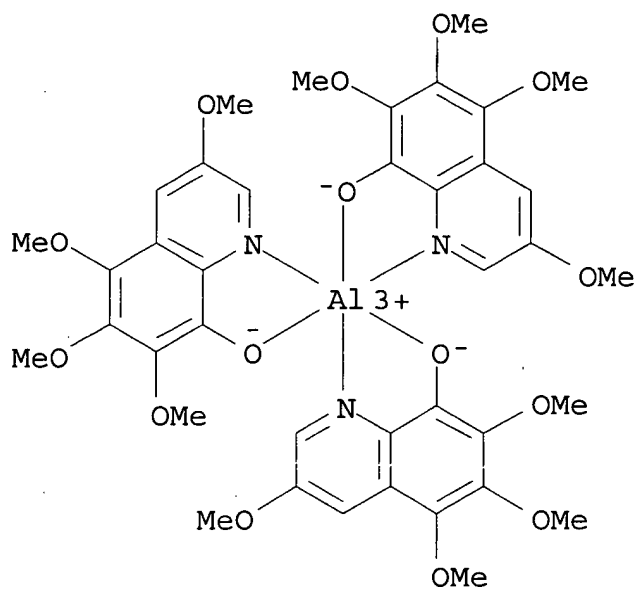
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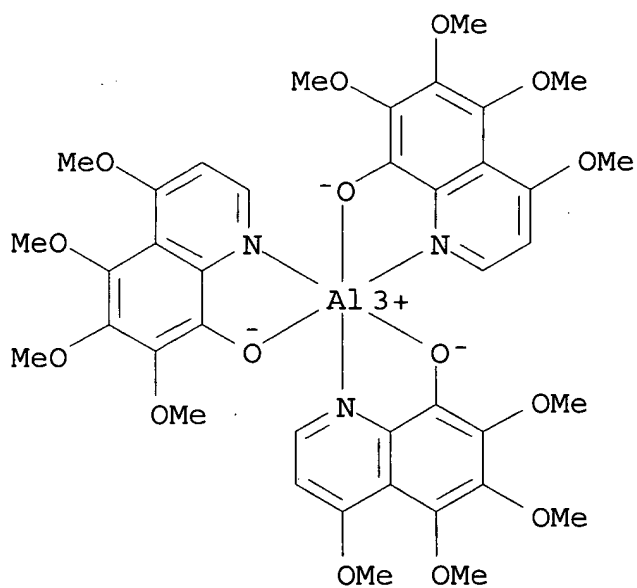
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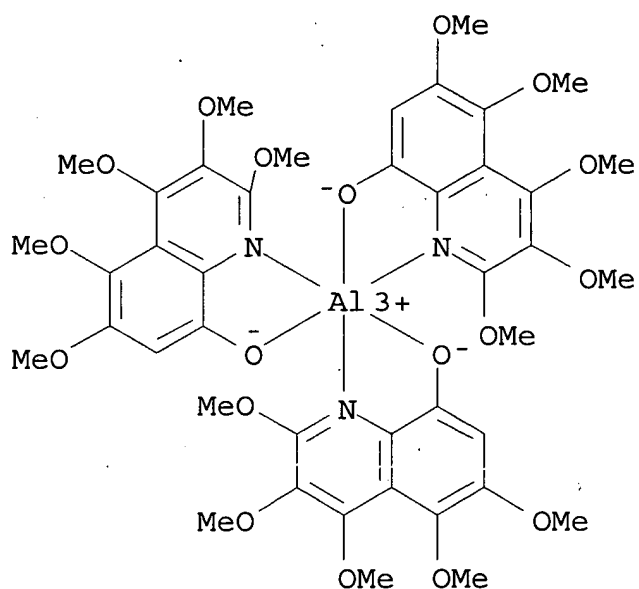
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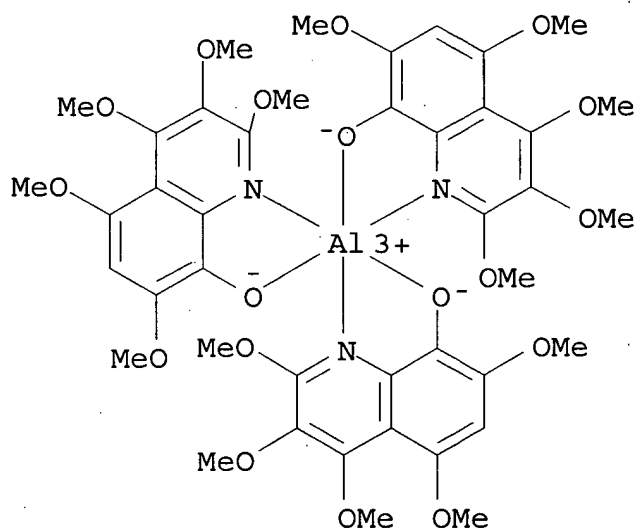
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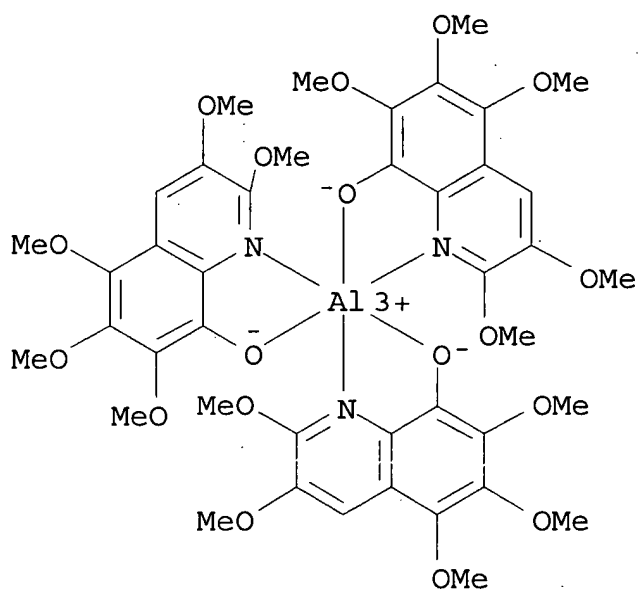
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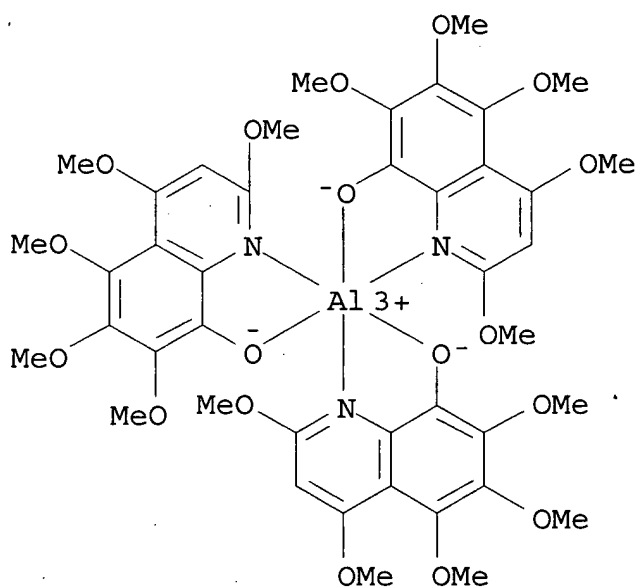
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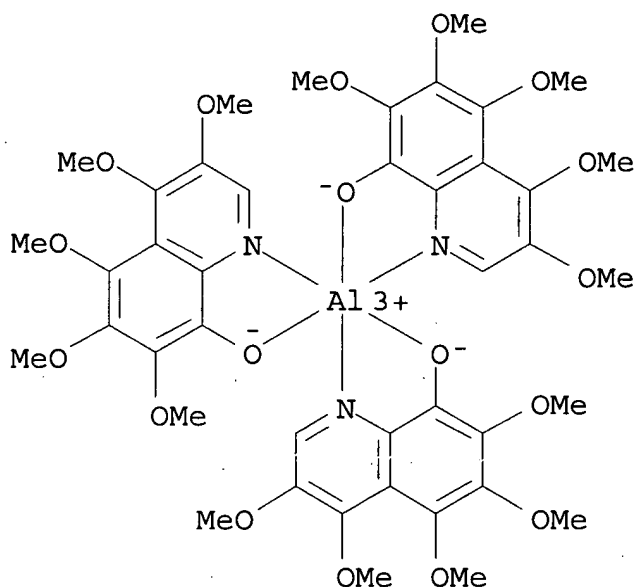
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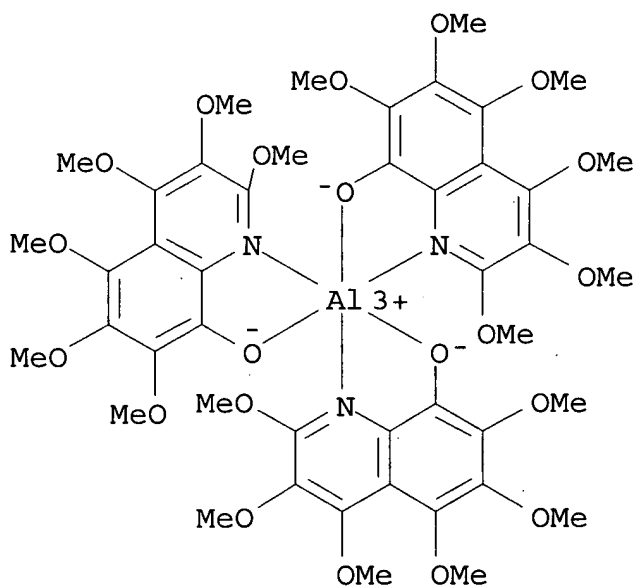
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RN 292631-95-9 ZCAPLUS
 CN Aluminum, tris(2,3,4,5,6,7-hexamethoxy-8-quinolinolato-
 .kappa.N1, .kappa.O8)- (9CI) (CA INDEX NAME)



IC ICM H05B033-14
 ICS C09K011-06; H05B033-10; H05B033-22
 CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related
 Properties)
 IT 517-51-1, Rubrene 7385-67-3, Nile Red 38215-36-0, Coumarin 6
 51325-91-8 51325-95-2 203381-28-6 292056-51-0 292625-02-6

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292631-95-9				

(org. electroluminescent component)

L5 ANSWER 3 OF 4 ZCAPLUS COPYRIGHT 2001 ACS

ACCESSION NUMBER: 2000:441449 ZCAPLUS

DOCUMENT NUMBER: 133:81409

TITLE: Electroluminescent material, electroluminescent element and color conversion filter

INVENTOR(S): Kita, Hiroshi; Suzuri, Yoshiyuki; Yamada, Taketoshi; Nakamura, Kazuaki; Ueda, Noriko; Okubo, Yasushi

PATENT ASSIGNEE(S): Konica Corporation, Japan

SOURCE: Eur. Pat. Appl., 80 pp.

CODEN: EPXXDW

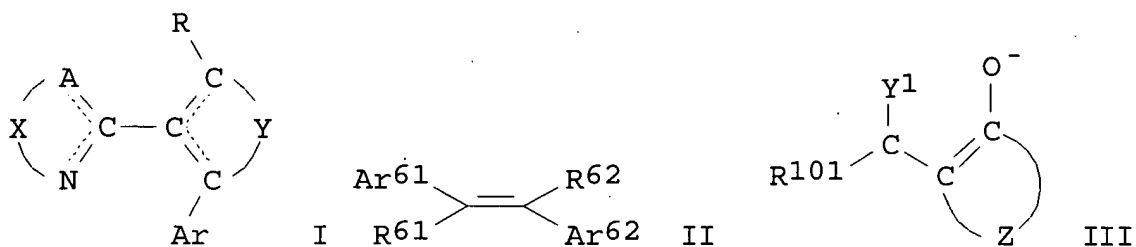
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1013740	A2	20000628	EP 1999-125813	19991223
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001143869	A2	20010525	JP 1999-365996	19991224
PRIORITY APPLN. INFO.:			JP 1998-370452	A 19981225
			JP 1999-246404	A 19990831
OTHER SOURCE(S):		MARPAT 133:81409		
GI				



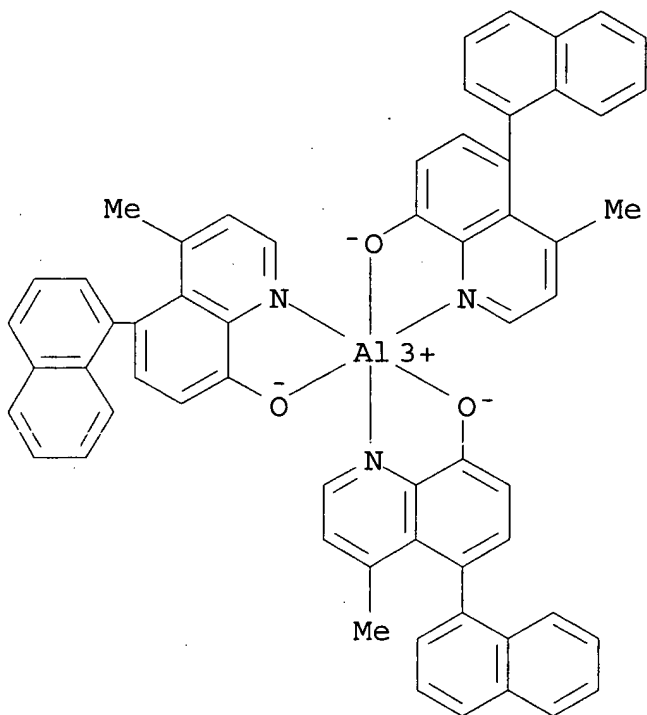
AB Electroluminescent materials are described which are based on derivs. of arom. heterocycles, binaphthyls, and triarylamines which include substituents (esp. biaryl substituents) contg. bonds capable of giving internal rotational isomerism, or on compds. described by the general formulas I (Ar = aryl; A = C, N, S or O; X = group of atoms necessary to form 5- or 6-member N contg. arom. heterocyclic ring; Y = group of atoms necessary to form 5- or 6-member arom. hydrocarbon or arom. heterocyclic ring, provided that the bond of C-N, C-A or C-C in the formula is a single or double bond; and R = H, substituent, or Ar) or II (Ar61 and Ar62 = each aryl or arom. heterocyclic; R61 and R62 = each H or substituent, provided that .gtoreq.1 of Ar61, Ar62, R61, and R62 = biaryl group contg. a bond capable of giving internal rotational isomerism or a group contg. such a biaryl group); rare earth metal complex fluorescent substances contg. at least an anionic ligand represented by the formula III (R101 = H or substituent; Y1 = O, S or N(R102); R102 = H or substituent; and Z = atoms forming a 4- to 8-membered ring) are also described. Electroluminescent elements comprising an electroluminescent material and a fluorescent substance emitting light having an emission max. at the wavelength different from that of light emitted from the electroluminescent material upon absorption of the light emitted from the electroluminescent material are also described, as are color conversion filters comprising a fluorescent substance emitting light having an emission max. at 400-700 nm upon absorption of the light emitted from the electroluminescent material.

IT 278794-70-0

(electroluminescent materials based on compds. including substituents with internal rotation isomers and rare earth complex-based fluorescent materials and electroluminescent elements and color conversion filters)

RN 278794-70-0 ZCAPLUS

CN Aluminum, tris[4-methyl-5-(1-naphthalenyl)-8-quinolinolato-.kappa.N1,.kappa.O8]- (9CI) (CA INDEX NAME)



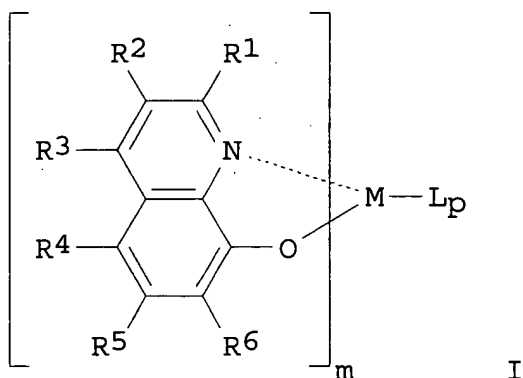
IC ICM C09K011-06
ICS H05B033-14; G02B005-20
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 76
IT 135-70-6, p-Quaterphenyl 2085-33-8, Tris(8-hydroxyquinolinato)aluminum 50926-11-9, Indium tin oxide 65181-78-4, N,N'-Diphenyl-N,N'-bis(3-methylphenyl)-1,1'-biphenyl-4,4'-diamine 73364-01-9 78732-97-5 96761-79-4, 5,5'-Bi-1,10-phenanthroline 100294-74-4 219843-55-7
278601-15-3 278601-34-6 278610-55-2 278610-56-3 278610-58-5
278610-92-7 278610-94-9 278610-95-0 278610-97-2 278611-00-0
278611-01-1 278611-03-3 278611-05-5 278611-09-9 278611-10-2
278611-11-3 278611-12-4 278611-13-5 278611-15-7 278611-16-8
278611-23-7 278611-25-9 278611-26-0 278611-27-1 278611-28-2
278611-29-3 278611-30-6 278611-31-7 278611-33-9 278794-68-6
278794-70-0 278794-72-2 278794-73-3 278794-75-5
278794-77-7

(electroluminescent materials based on compds. including substituents with internal rotation isomers and rare earth complex-based fluorescent materials and electroluminescent elements and color conversion filters)

L5 ANSWER 4 OF 4 ZCAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:610819 ZCAPLUS
DOCUMENT NUMBER: 131:250257

TITLE: Organic electroluminescent device containing
 halogenated chelate complex
 INVENTOR(S): Terazono, Shinji; Asari, Goro; Takahashi, Akira
 PATENT ASSIGNEE(S): Asahi Glass Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11260558	A2	19990924	JP 1998-57132	19980309
OTHER SOURCE(S): MARPAT 131:250257				
GI				

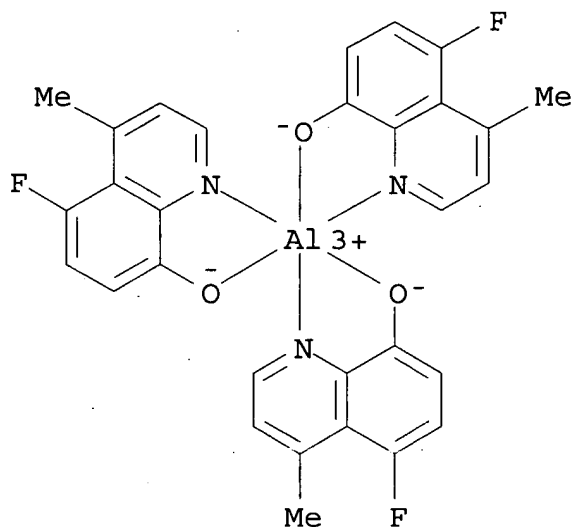


AB The device contains an anode, a light-emitting layer, an interface
 org. layer, and a cathode, in which the interface layer contains a
 chelate complex I (R1-6 = H, halogen, alkyl, alkoxy, aryl, aryloxy,
 acyl, aralkyl; M = metal; m = 1-3 integer; L = alkoxy, aryloxy; p =
 0, 1, 2; at least one of R1-6 = halogen). The device shows low
 emission voltage and high luminance with efficiency.

IT **244201-79-4**
 (org. electroluminescent device contg. halogenated chelate
 complex)

RN 244201-79-4 ZCAPLUS

CN Aluminum, tris(5-fluoro-4-methyl-8-quinolinolato-
 .kappa.N1,.kappa.O8)- (9CI) (CA INDEX NAME)



IC ICM H05B033-22
ICS C07D215-30; C09K011-06; H05B033-14
CC 73-12 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
IT 244201-76-1 244201-77-2 244201-78-3 **244201-79-4**
(org. electroluminescent device contg. halogenated chelate complex)